BLM Nevada

Amargosa



Toad

A 12-mile stretch along the Amargosa River is the entire world of the Amargosa toad; and the toads were being crowded out by the early 1990s. The water and mud and plants a toad needs to live were being dominated by stronger competitors. A medium-sized toad is no match for tamarisk, crawdads, and the trampling hooves of wild burros.



Habitat Enhancement

Fencing springs to protect plants from overgrazing, removing excess wild burros and eradicating tamarisk are helping to improve the toads' habitat. A fencing and spring project was started in 2001 to protect toad breeding habitat.

Removing about 900 wild burros from the area has significantly reduced the negative impacts of overgrazing, water consumption, death from being stepped on, degradation of water quality, and soil compaction along stream and spring banks.

Getting rid of salt cedar, or tamarisk, is critical to protecting toad habitat. Tamarisk is an aggressive water hog that native plants don't stand a chance against. Tamarisk sucks up huge quantities of water and secretes dissolved salts in the leaves it drops to the ground. Over time, the salt accumulation on the ground becomes toxic to native plants and prevents their germination and growth. Eradicating noxious weeds is often considered an insurmountable task; it is a task that needs the concerted effort of all affected landowners to succeed.

The Nature Conservancy, a private, non-profit environmental group, bought two important properties in the Oasis Valley to secure habitat for the toad and other wetland species. The Beatty community is helping cleanup the parcels and restore native spring and stream vegetation. Lessons learned on the Conservancy properties can show private landowners how to create and protect habitat for the benefit of many species.

Conservation Agreement

The Amargosa Toad Working Group, which includes representatives from Nevada Division of Wildlife, U.S. Fish and Wildlife Service, Bureau of Land Management, Nye County, The Nature Conservancy, Nevada Natural Heritage Program, and University of Nevada, Reno, has developed a conservation agreement and strategy for the Amargosa toad. Management directions in the agreement are designed to ensure the perpetuation of the Amargosa toad and preclude a future listing under the Endangered Species Act.

If suitable habitat protection eludes these efforts, the BLM is prepared to designate the Oasis Valley as an Area of Critical Environmental Concern (ACEC). The 1994, proposed Tonopah Resource Management Plan identifies the Oasis Valley for potential ACEC status to protect the toad and other sensitive species, including the Oasis Valley speckled dace and the Oasis Valley spring snail.



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> Drawing: Glenn Clemmer Photo: Michael Burroughs BLM/BM/GI-01/015+9212

As early as 1977, the Amargosa toad was a candidate species for listing under the Endangered Species Act. The Nevada Natural Heritage Program designated it a globally imperiled species. Now, through the efforts of private groups and local, state and federal agencies, the Amargosa toad has a chance to keep its stretch of the river that flows through Oasis Valley and Beatty. The toads' status is down-graded to a species of concern, and there is still work to do to ensure the Amargosa toad will remain a part of the Amargosa River.

Description

A member of the family of North American true toads, Amargosa toads, or *Bufo nelsoni*, are chunky, short-legged and warty. Their most telling features are the distinctly colored humps near the ears and the large webs between the toes of its hind feet.

Coloration ranges from buff to olive with lots of specks and spots between the warts, and a yellow to olive stripe down the backbone. Underneath is a whitish throat and belly. Scattered black blotches on the belly merge lower down to form a dark, pants-like patch. The pants are distinct in juveniles. Colors and markings vary considerably among individuals.

The Amargosa toad is considered voiceless; except during the breeding season when the males make peeping calls. The males develop thumb and finger nuptial pads so they can hold on to the slippery female in a mating embrace. During the embrace the female sheds eggs which are fertilized in the water.

Natural History

Amargosa toads generally breed during March and April. However, in some years, egg clutches have been seen as late as July, and tadpoles have been present in early November. Egg clutches are long strings of a few hundred to six thousand or more eggs. An average clutch is around three thousand eggs. These strings of eggs are usually found in shallow water with light to moderate plant cover.

Tadpoles develop in three to seven days, depending on water temperatures. As the tadpoles grow legs and drop their tail, they become immature toads called toadlets. Toadlets hang out in areas with ample, clean flowing or ponded water. This type of open water habitat may be critical to the toad's life cycle during the immature stage. Toadlets are more active during the day than adults.



Adult toads use bushes, woody structures, rocks and rodent burrows as resting and hiding spots. Some adult toads, particularly in late summer and fall, feed and rest considerable distances, sometimes 200 yards or more, from open water. Adult toads will generally visit open water, but this may not be necessary if they are located near moist soil. Most adults feed and move around at night from spring through fall. Adult toads hibernate from November to March, depending on temperatures.

Good toad breeding habitat has open, still water with moderately dense plants and bushes along the banks for cover. Successful breeding habitat has soils good for burrowing in and shrubby areas for night foraging. Toads eat flying insects and crickets.

How Many Toads Are There?

A petition to list the Amargosa toad as a threatened or endangered species in 1995 kicked off a serious effort to find out how many toads there were. Surveys showed an increasing number of toads over successive years. In 1998, about 655 adult toads were recorded. Two years later, 1,415 toads were captured with 540 recaptures from the previous two years.

Amargosa toads are chunky, short-legged and warty.

Distinctive features are the yellow to olive stripe down the backbone, the colored humps near the ears, and large webs between the toes on the hind feet.